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Kevin M. Patfield

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FAY SHARPE/LUCENT
1228 Euclid Avenue, 5th Floor
The Halle Building
Cleveland, OH 44115-1843

EXAMINER

ADHAMI, MOHAMMAD SAJJID

ART UNIT

PAPER NUMBER

2416

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/632,196	Applicant(s) PATFIELD, KEVIN M.	
	Examiner MOHAMMAD S. ADHAMI	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-15 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-15, and 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's amendment filed 4/30/2009 is acknowledged.
- Claims 6,8, and 22 have been amended.
- Claim 28 has been added.
- Claims 5 and 16-21 are cancelled.
- Claims 1-4,6-15, and 22-28 are pending.
- Applicant's response and amendment with respect to the rejection of claims 6 and 7 under 35 USC 112 2nd paragraph is noted and the rejection is withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,2,8-10,22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Kallio (US App. 2004/0190498).

Re claims 1 and 8:

Kallio discloses *applying identifiers to originating half calls such that the originating half calls are distinctly identifiable with respect to one another*
(Para.[0037] a call leg is identified by the combination of call-ID).

Kallio further discloses *the identifiers accompanying terminating half calls that form associated pairs of half calls together with the originating half calls to which the identifiers were applied* (Para.[0037] a call leg is identified by the combination of call-ID and Para.[0042] when the REFER message is received for this given IMS session identified by Call ID).

Kallio further discloses *examining terminating half calls to detect the identifiers* (Para.[0053] the MGCF attempts to establish a CS call towards the participant B which has been identified by the TEL URI in the REFER message and Para.[0056] the MGCF to request Connected Line identity of the CS domain subscriber B. it can be checked whether the identity of the subscriber received in the Request-URI of the REFER message is the correct one).

Kallio further discloses *upon detection of the identifiers, the terminating half calls accompanying the detected identifiers and the originating half calls to which the identifiers were applied are recognized as associated pairs of half-calls* (Para.[0014] connecting the first and second call legs to form a single connection and Para.[0055] connects the call leg on the IMS side and the call leg on the side of the participant B of the connections in the IMS-MGW. Thus, an end-to-end speech connection is established).

Re claim 2:

Kallio discloses *prior to applying identifiers, receiving the originating half calls from the calling consumer premises equipment over a packet-switched network* (Para.[0015] the gateway device is configured to receive from the IP-

based network a trigger message including a first address information and a second address information and in response to the trigger message establish a second call leg towards a second connection end located in the IP-based network and Para.[0011] routed from the IP-based network and Fig.5 ref. step 1 and step 2 and Para.[0049] and [0050]).

Kallio further discloses *translating the received originating half-call from a packet-switched call format to a circuit-switched call format such that each originating half-call defines an originating half-call routing path having a packet-switched portion and a circuit-switched portion* (Para.[0010] a method for enabling interworking between an IP-based network and a circuit-switched network – where communication between an ip-based network and a circuit-switched network uses translating from packet-switched format to circuit-switched format).

Kallio further discloses *after applying the identifier, directing the received originating half-calls to a circuit-switched network for routing* (Para.[0055] an end-to-end speech connection is established between the conference functionality of the IMS domain and the participant B in the CS domain).

Kallio further discloses *prior to examining the terminating half calls, receiving the terminating half calls from the circuit-switched network* (Para.[0053] the MGCF takes an active role in order to successfully inform the participant B of the conference - where the call leg to participant B is the terminating half call).

Kallio further discloses *translating the received terminating half calls from the circuit-switch call format to the packet-switched call format such that each terminating half-call defines a terminating half-call routing path having a packet-switched portion and a circuit-switched portion* (Para.[0010] a method for enabling interworking between an IP-based network and a circuit-switched network – where communication between an ip-based network and a circuit-switched network uses translating from packet-switched format to circuit-switched format).

Kallio further discloses *after examining terminating half calls, directing the received terminating half calls to the called consumer premises equipment over the packet-switched network* (Para.[0055] an end-to-end speech connection is established between the conference functionality of the IMS domain and the participant B in the CS domain).

Re claim 9:

Kallio discloses *receiving the originating half calls from the calling consumer premises equipment over a packet-switched network* (Para.[0015] the gateway device is configured to receive from the IP-based network a trigger message including a first address information and a second address information and in response to the trigger message establish a second call leg towards a second connection end located in the IP-based network and Para.[0011] routed from the IP-based network and Fig. 5).

Kallio further discloses *translating the received originating half-call from a packet-switched call format to a circuit-switched call format such that each originating half-call defines an originating half-call routing path having a packet-switched portion and a circuit-switched portion* (Para.[0010] a method for enabling interworking between an IP-based network and a circuit-switched network – where communication between an ip-based network and a circuit-switched network uses translating from packet-switched format to circuit-switched format).

Kallio further discloses *directing the translated originating half-calls to a circuit-switched network for routing* (Para.[0055] an end-to-end speech connection is established between the conference functionality of the IMS domain and the participant B in the CS domain).

Kallio further discloses *receiving the terminating half calls from the circuit-switched network* (Para.[0053] the MGCF takes an active role in order to successfully inform the participant B of the conference - where the call leg to participant B is the terminating half call).

Kallio further discloses *translating the received terminating half calls from the circuit-switch call format to the packet-switched call format such that each terminating half-call defines a terminating half-call routing path having a packet-switched portion and a circuit-switched portion* (Para.[0010] a method for enabling interworking between an IP-based network and a circuit-switched network – where communication between an ip-based network and a circuit-

switched network uses translating from packet-switched format to circuit-switched format).

Kallio further discloses *directing the translated terminating half calls to the called consumer premises equipment over the packet-switched network* (Para.[0055] an end-to-end speech connection is established between the conference functionality of the IMS domain and the participant B in the CS domain).

Re claim 10:

Kallio discloses *the translation means comprising a gateway bridging the packet-switched network with the circuit-switched network* (Fig.1 ref.40 is a gateway bridging a packet-switched network and a circuit-switched network).

Re claim 22:

Kallio discloses *applying identifiers to a first leg of calls routed through a gateway, where the identifiers distantly identifying the respective calls to which they are applied from one another* (Para.[0037] a call leg is identified by the combination of call-ID and Para.[0042] when the REFER message is received for this given IMS session identified by Call ID and Fig.1 ref.40 is a gateway bridging a packet-switched network and a circuit-switched network).

Kallio further discloses *examining a second leg of calls routed through the gateway to detect for identifiers* (Para.[0053] the MGCF attempts to establish a CS call towards the participant B which has been identified by the TEL URI in the REFER message and Para.[0056] the MGCF to request Connected Line identity

of the CS domain subscriber B. it can be checked whether the identity of the subscriber received in the Request-URI of the REFER message is the correct one).

Re claim 23:

Kallio discloses *the gateway connecting to the circuit-switched network through a circuit-switched telecommunications switch* (Para.[0008] Allowing interworking between IMS and CS domains, where users use public-switched telephone networks (PSTN)).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3,4,11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio in view of Jackson (US 7,286,521).

Re claims 3,4,11, and 12:

As discussed above, Kallio meets all the limitations of the parent claims.

Kallio does not explicitly disclose *eliminating the circuit-switched portions and reducing the routing paths to only their packet-switched portions*.

Jackson discloses *eliminating the circuit-switched portions and reducing the routing paths to only their packet-switched portions* (Col.7 lines 31-37 Using

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the VoIP in the last 100 meters. Elimination of reserved circuit capacity – where VoIP is a packet-switched portion).

Kallio and Jackson are analogous because they both pertain to voice calls.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kallio to include eliminating the circuit-switched portion and reducing the routing paths to only packet-switched portions as taught by Jackson in order to use network resources more efficiently.

5. Claims 6,7,13, 15, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio in view of Levy (US App.2008/0044087).

Re claims 6,7,13, and 28:

As discussed above, Kallio meets all the limitations of the parent claims.

Kallio does not explicitly disclose *superimposing audio watermarks on traffic, where the audio watermarks are substantially unperceivable by the end user*.

Levy discloses *superimposing audio watermarks on traffic, where the audio watermarks are substantially unperceivable by the end user* (Para.[0055] a distribution trail is formed from the distribution source to the first user (via the audio watermark's transactional ID)).

Kallio and Levy are analogous because they both pertain to data transmission.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kallio to include an audio watermark as taught by Levy in order to identify a user for tracking.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio in view of Jackson as applied to claim 13 above, and further in view of Levy.

Re claim 14:

As discussed above, Kallio meets all the limitations of the parent claims.

Kallio does not explicitly disclose *superimposing audio watermarks on traffic, where the audio watermarks are substantially unperceivable by the end user*.

Levy discloses *superimposing audio watermarks on traffic, where the audio watermarks are substantially unperceivable by the end user* (Para.[0055] a distribution trail is formed from the distribution source to the first user (via the audio watermark's transactional ID)).

Kallio and Levy are analogous because they both pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kallio to include an audio watermark as taught by Levy in order to identify a user for tracking.

7. Claims 24-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Kallio in view of Roeder (US App. 2002/0115432).

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Re claims 24-27:

As discussed above, Kallio meets all the limitations of the parent claims.

Kallio does not explicitly disclose *a gateway that appears as a remote digital terminal, a class five switch, a GR-303 interface, and a V.5.2 interface.*

Roeder discloses *a gateway that appears as a remote digital terminal, a class five switch, a GR-303 interface, and a V.5.2 interface* (Para.[0068] forward the calls to the gateway using remote call forwarding and Para.[0082] one or more class 5 switches and Para.[0083] a GR-303 interface, a V5.2 interface).

Kallio and Roeder are analogous because they both pertain to voice calls.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kallio to include a gateway appearing as a remote terminal, a class 5 switch, a GR-303 interface, and a V.5.2 interface in order to use well-known communications devices and standards to provide network connectivity.

Response to Arguments

8. Applicant's arguments filed 4/30/2009 have been fully considered but they are not persuasive.

In the remarks, Applicant contends that Kallio does not disclose applying identifiers to call legs themselves, but rather indicates how the call legs are identified in a control layer.

Examiner respectfully does not see the objective of the specific argument of the class legs are identified in a control layer. Kalio does disclose applying identifiers to call legs (Para.[0037] a call leg is identified by the combination of call-ID and Para.[0042] when the REFER message is received for this given IMS session identified by Call ID). This addresses the claimed limitation. The call-ID is used to identify a call leg and therefore the identifier is applied to the call leg.

In the remarks for claims 1,2,8-10,22, and 23, Applicant contends Kalio does not disclose using audio watermarks as identifiers.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., audio watermarks as identifiers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In the remarks, Applicant contends Kalio does not disclose examining a terminating half-call to detect an identifier.

The Examiner respectfully disagrees. Kalio does disclose examining a terminating half-call to detect an identifier (Para.[0053] the MGCF attempts to establish a CS call towards the participant B which has been identified by the TEL URI in the REFER message and Para.[0056] the MGCF to request the

Connected Line identity of the CS domain subscriber B. It can be checked whether the identity of the subscriber received in the Request-URI of the REFER message is the correct one). The call leg with participant B is examined and identified. The identity of the subscriber is checked.

In the remarks, Applicant contends Kalio does not disclose upon detection of the identifiers, recognizing the identifiers as associated pairs of half-calls.

The Examiner respectfully disagrees. Kalio does disclose upon detection of the identifiers, recognizing the identifiers as associated pairs of half-calls (Para.[0014] connecting the first and second call legs to form a single connection and Para.[0055] connects the call leg on the IMS side and the call leg on the side of the participant B of the connections in the IMS-MGW. Thus, an end-to-end speech connection is established). The two call legs are recognized as being associated when the end-to-end speech connection is established. The connection is set between two legs, and the identifiers are used to verify the appropriate call legs have been connected.

In the remarks, Applicant contends Kalio does not disclose receiving an originating half-call prior to applying an identifier.

The Examiner respectfully disagrees. Kalio does disclose receiving an originating half-call prior to applying an identifier (Para.[0015] the gateway device is configured to receive from the IP-based network a trigger message including a

first address information and a second address information and in response to the trigger message establish a second call leg towards a second connection end located in the IP-based network and Para.[0011] routed from the IP-based network and Fig.5 ref. step 1 and step 2). The identifier for the originating half call (I) is received before the identifier is applied (Fig.5 ref. Step 2 and Para.[0049] and [0050] the MRFC returns the SIP URI. The initiator A issues respective REFER messages).

In the remarks, Applicant contends Kalio does not disclose directing a received originating half call to a circuit-switched network after applying an identifier.

The Examiner respectfully disagrees. Kalio does disclose directing a received originating half call to a circuit-switched network after applying an identifier (Para.[0055] an end-to-end speech connection is established between the conference functionality of the IMS domain and the participant B in the CS domain). Fig.5 shows an originating half call being directed to a circuit-switched network (Circuit Switched Domain). As explained above, the identifier has already been applied; therefore the originating half call is directed to a circuit-switched network after applying an identifier.

In the remarks, Applicant contends Kalio does not disclose prior to examining the terminating half call, receiving the terminating half call from the circuit switched network.

The Examiner respectfully disagrees. Kalio does disclose prior to examining the terminating half call, receiving the terminating half call from the circuit switched network (Para.[0053] the MGCF takes an active role in order to successfully inform the participant B of the conference - where the call leg to participant B is the terminating half call). The terminating half call is examined and this occurs after the terminating half call is received. If the terminating half call had not been received, then there would be no terminating half call to examiner.

In the remarks, Applicant contends Kalio does not disclose after examining the terminating half calls for identifiers, directing received terminating half-calls to the called consumer premise equipment over the packet switched network.

The Examiner respectfully disagrees. Kalio does disclose after examining the terminating half calls for identifiers, directing received terminating half-calls to the called consumer premise equipment over the packet switched network (Para.[0055] an end-to-end speech connection is established between the conference functionality of the IMS domain and the participant B in the CS

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domain). The call is routed from the caller over the packet switched network (Fig.5 ref. IMS Domain and Circuit Switched Domain).

In the remarks, Applicant contends Kalio does not disclose receiving an originating half-call from calling consumer premises equipment over a packet switched network.

The Examiner respectfully disagrees. Kalio does disclose receiving an originating half-call from calling consumer premises equipment over a packet switched network (Para.[0015] the gateway device is configured to receive from the IP-based network a trigger message including a first address information and a second address information and in response to the trigger message establish a second call leg towards a second connection end located in the IP-based network and Para.[0011] routed from the IP-based network and Fig.5). In figure 5, the originating call is received from a consumer premise equipment (ref. A user Conf. owner) over a packet switched network (IMS Domain).

In the remarks, Applicant contends Kalio does not disclose translating and directing a received originating half call from a packet switched call/network to a circuit switched call/network.

The Examiner respectfully disagrees. Kalio does disclose translating and directing a received originating half call from a packet switched call/network to a circuit switched call/network and from a circuit switched network to a packet

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switched network (Para.[0010] a method for enabling interworking between an IP-based network and a circuit-switched network – where communication between an ip-based network and a circuit-switched network uses translating from packet-switched format to circuit-switched format and Fig. 5). Figure 5 shows a call from a packet-switched network to a circuit-switched network. The call is translated from the packet switched format to a circuit switched format when it goes from the packet switched network to the circuit switched network. When data is transmitted from the circuit switch to the packet switch, it is translated from a circuit switched format to a packet switched format.

In the remarks, Applicant contends Kalio does not disclose an audio watermark generator that applies identifiers and an audio watermark sensor that examines a second leg of calls to detect for identifiers.

The Examiner respectfully disagrees. Kalio does disclose an audio watermark generator that applies identifiers and an audio watermark sensor that examines a second leg of calls to detect for identifiers (Para.[0037] a call leg is identified by the combination of call-ID and Para.[0042] when the REFER message is received for this given IMS session identified by Call ID and Fig.1 ref.40 is a gateway bridging a packet-switched network and a circuit-switched network and Para.[0053] the MGCF attempts to establish a CS call towards the participant B which has been identified by the TEL URI in the REFER message and Para.[0056] the MGCF to request Connected Line identity of the CS domain

subscriber B. it can be checked whether the identity of the subscriber received in the Request-URI of the REFER message is the correct one). The MRFC applies an identifier to the call leg and reads on the claimed limitation of an audio watermark generator that applies identifiers. The MGW examines a second call leg to detect for identifiers and reads on the claimed limitation of an audio watermark sensor.

In the remarks, Applicant contends Kalio does not disclose recognizing associated pairs of half calls.

The Examiner respectfully disagrees. Kalio does disclose recognizing associated pairs of half calls (Para.[0014] connecting the first and second call legs to form a single connection and Para.[0055] connects the call leg on the IMS side and the call leg on the side of the participant B of the connections in the IMS-MGW. Thus, an end-to-end speech connection is established).

In the remarks, Applicant contends Jackson does not disclose routing or releasing of routing paths or circuit switched portions of routing paths.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., routing or releasing of routing paths or circuit switched portions of routing paths) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not

read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In the remarks, Applicant contends Levy does not disclose superimposing audio watermarks on traffic.

The Examiner respectfully disagrees. Levy does disclose superimposing audio watermarks on traffic (Para.[0055] a distribution trail is formed from the distribution source to the first user (via the audio watermark's transactional ID)). The audio watermark is applied to data that is transmitted ("traffic").

In the remarks, Applicant contends Roeder does not disclose a gateway that is a class 5 switch, a GR-303 and a V.5.2 interface.

The Examiner respectfully disagrees. Roeder does disclose a gateway that is a class 5 switch, a GR-303 and a V.5.2 interface (Para.[0068] forward the calls to the gateway using remote call forwarding and Para.[0082] one or more class 5 switches and Para.[0083] a GR-303 interface, a V5.2 interface and Para.[0100]). The gateway can be a class 5 switch, a GR-303 and a V.5.2 interface.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD S. ADHAMI whose telephone number is (571)272-8615. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohammad S Adhami/
Examiner, Art Unit 2416

/Chi H Pham/
Supervisory Patent Examiner, Art
Unit 2416